

## **Comments on the Market Advisory Committee draft report June 1, 2007 on Greenhouse Gas Emissions Trading**

Vital for emissions trading is the way in which the allowances are allocated. Worldwide a keen interest is developing into the precise rules for effective allocation, e.g. California, Regional Greenhouse Gas Initiative (RGGI), Australia, Canada, European Union.

The Californian Market Advisory Committee (MAC) strongly recommends that California distribute allowances in a manner that advances following principles (page 52):

- Reduces the cost of the program to consumers, especially low-income consumers
- Avoids windfall profits where such profits could occur
- Promotes investment in low-GHG technologies and fuels (including energy efficiency)
- Advances the state's broader environmental goals by ensuring that environmental benefits accrue to overburdened communities
- Mitigates economic dislocation caused by competition from firms in uncapped jurisdictions
- Avoids perverse incentives that discourage or penalize investments in low-GHG technologies and fuels (including energy efficiency)
- Provides transition assistance to displaced workers
- Helps to ensure market liquidity

The MAC recommends that early action be always promoted (pp 56-57). Therefore the MAC recommends auctioning and to the extent that free allocation is employed, the basis for such allocation should be benchmarking. The sense of the MAC is to use benchmarks while increasing the portion of auctioning gradually in the future.

### ***Allocation rules are vital for effectiveness***

Once, economists assumed that scarcity of allowances would suffice for an effective trading scheme. Experience has shown that the allocation method is as vital and that historical grandfathering suffers from fundamental shortcomings. See for example Grubb and Neuhoﬀ (2006)<sup>1</sup> and Delbeke (2007)<sup>2</sup>. The Californian MAC therefore rightly considers the vital importance of an effective allocation and refrains from historical grandfathering.

### ***Free of charge allocation***

Auctioning is generally accepted as giving the best environmental outcome, but only if applied globally. Competitiveness of industry is heavily affected by the cost of allowances and through the higher price of electricity, which will cause "leakage" of emissions and jobs. Therefore free of charge allocation is being considered as the practical alternative. Literature has but discussed historical cap & trade and performance-based allocation separately so far.

### ***Historical cap & trade***

*Definition: allowance allocation with an ex-ante frozen cap for each individual installation and company, based on historical information, be it historical grandfathering (historical emissions) or benchmarks with historical production*

Cap & trade provides certainty of the environmental outcome – the total cap – although too stringent a cap cannot be met. The cost of carbon is reflected in product prices through the "opportunity-cost" principle.

<sup>1</sup> Grubb, Prof. Michael, Karsten Neuhoﬀ (2006), "Allocation and competitiveness in the EU emissions trading scheme: policy overview", Climate Policy, Climate Policy 6 (2006) 5-28, [www.climatepolicy.com](http://www.climatepolicy.com)

<sup>2</sup> Conference "Carbon Market Insights", Point Carbon, Copenhagen, 13-14 March 2007.

Disadvantages of historical grandfathering are lack of effectiveness through the update of the historical reference period, distortion of market share competition – which also inhibits effectiveness as efficient producers are inhibited to win market share – “leakage” of emissions as under auctioning, unsolvable problems with new entrants and closures and, last but not least, economic rents. The latter – electricity windfall profits – are bound to double, to triple or even quadruple in the EU Emissions Trading Scheme from the 1<sup>st</sup> to the 2<sup>nd</sup> trading period. Equally as under auctioning, competitiveness of industry is negatively affected through the “leakage” mechanism and the higher power prices.

To improve effectiveness, the EU Commission, the European Parliament and the Member States are abandoning historical grandfathering and are considering ex-ante benchmarking based on historical production and/or auctioning as the sole allocation methods for the EU ETS in the 3<sup>rd</sup> trading period, which is being extended to eight years (2013-2020).

Ex-ante benchmarking based on recent historical production limits the CO<sub>2</sub>-price effect in product prices, improves effectiveness but leaves the other disadvantages unaffected.

### **Performance-based allocation**

*Definition: allowance allocation based on relative targets, being benchmarks or performance standards and actual production; this type of allocation is also known as “Performance Standard Rate – PSR”, “baseline-and-credit”, “rate-based”, “intensity-based” or “output-based”*

Performance based allocation on condition of producing solves all disadvantages of cap & trade. But now the environmental outcome becomes uncertain. The cost of carbon is hardly reflected in product prices. The lower electricity price may lead to a higher demand, with higher cost to achieve the total cap – “production subsidy”.

### **Combining two competing systems: performance-based cap & trade**

*Definition: allowance allocation based on true benchmarks with guarantee of the total cap by annual adjustment of the future benchmarks in case of higher than expected production growth.*

Combining both systems – so far not addressed in literature – ensures effectiveness, provides for the lowest impact on competitiveness while disposing of competitive distortions and other disadvantages of historical cap & trade.

We have developed solutions which fully guarantee the total cap and remove the production subsidy effect through the use of true benchmarks with ex-post adjustment to actual production. See for a summary of our findings the power point presentations:

- EUETSReview-3rdMeeting benchmarks V.Schyns 210507
- EUETSReview-3rdMeeting benchmark & activity rate A.Loske 210507

Recommendations to the Market Advisory Committee:

- To start the development of true benchmarks for all major emitters;
- To deploy one benchmark for electricity, situated between the marginal CO<sub>2</sub> efficiency of power plants at high and at low electricity demand, to avoid windfall profits and to promote investment in low-GHG technologies and fuels (including energy efficiency);
- To adopt performance-based cap & trade in transition towards full auctioning in the long term.

<a href="mailto:Vianney.Schyns@usgbv.com">Vianney.Schyns@usgbv.com</a> Tel. +31-(0)46-47 65017 Utility Support Group B.V. Manager Climate & Energy Efficiency USG is utility provider for a.o. DSM and SABIC	<a href="mailto:Jan.Berends@dsm.com">Jan.Berends@dsm.com</a> Tel. +31-(0)45- 57 82455 Royal DSM N.V. Corporate Head of Environment and Product Safety
--	--